

SKYWATCH® Agros with 80 cm piercing probe

Instructions Manual

You have just acquired a high precision instrument, manufactured using the most up-to-date technologies. It was conceived to resist to an intensive use. However and so that it preserves its aspect and its precision, we recommend that you to treat it carefully and to carefully read this owner's manual.

The LCD panel is split into 2 areas :

Centre: display of humidity gradient
Bottom: display of temperature modes

Start up

To start up your Agros, push either the temperature  or the wind  button.

Measuring Humidity

The humidity sensor is located at the end of the 80 cm piercing probe.

Ambient humidity :

Measurement unit : % rH (percentage of relative humidity)
Display : resolution to 0.5 % rH
Measuring range : from 2 % rH to 100 % rH
Measuring cycle : one measurement carried out every second
Precision : +/- 3.5 %
Response time : in the event of a sudden change in the humidity or temperature, one should give the sensor enough time to allow it to adapt to the ambient air.

Please refer also to *Response time* in the section "Measuring temperature".

In general, the following facts must be taken into account when measuring :

1. Ambient humidity depends on the temperature. When moving the instrument from a warm environment to a cold environment, the values measured will vary;
2. Humidity is not equally distributed in the atmosphere. Consequently, even though two locations used for measuring may be close to each other, both results may be quite different;
3. A person perspiring and/or breathing very near the instrument may impact on the measurement.

Dew point : The dew point is calculated by taking into account the humidity and the ambient temperature. It gives the temperature at which the water vapour contained in the air has reached saturation point (forming of cloud, fog, dew, condensation on objects, etc.)

Example : At an ambient temperature of 23°C and with a humidity of 39.5 % rH, the dew point is at 12°C

Display : Press the temperature  button for about one second, then release it in order to display the temperature of the dew point. The dew point in °C or °F is then shown in the lower part of the display, using the symbol .

Measuring Temperature

The temperature sensor is located at the end of the 80 cm piercing probe.

Ambient temperature :

Measurement units : in order to choose between units, press the temperature button for approximately 4 seconds. The following selection will appear: °C (degrees Celsius) and °F (degrees Fahrenheit)

Display : resolution to 0.5°C / 1°F

Measuring range : °C from -20 to 80 °F from -4 to 176

Measuring cycle : one measurement carried out every second

Precision : +/- 0.5°C at 25°C and +/- 1.5°C in the measuring range between -20 and 80°C

Response time : The temperature sensor is located at the end of the probe. In the event of a sudden change in the temperature, it is necessary to allow the sensor enough time to reach the ambient temperature. This duration will depend on the temperature difference and wind force.

Holding the probe in one's hands for a long period of time may have an impact on measuring the temperature, all the more if the temperature is low.

Switching off

The Agros instrument will automatically switch off approximately 10 minutes after a button was last actuated.

You can also turn it off manually by pressing simultaneously the temperature  and wind  buttons for approximately 2 seconds.

Power Supply

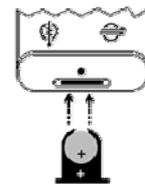
The SKYWATCH Agros operates on a replaceable, type CR2032 3V door-knob cell battery.

Battery low : when the battery provides insufficient power, the middle display of your ATMOS instrument displays the symbol , thus telling you that it is time to replace the battery.

Battery lifetime: more than 2 years for regular use.

To change the battery:

1. Open the drawer on the bottom of the instrument by gripping the ends between the thumb and the index finger.
2. Replace the run-down battery with a new one
3. Insert the drawer back into the instrument, being mindful of the polarity. Please note that wrong positioning of the battery drawer (inverted polarity) inside the instrument may cause irreversible damages!



Recommendations for Use

Even though the components we use are resistant to high temperatures, we recommend you do not expose your instrument to intense heat sources, by leaving it in the sun under the windscreen of a car for instance.

This instrument is not waterproof, but it can nonetheless be used in the rain for one measurement. However, under no circumstances should it be expected to withstand bad weather for a long period of time or to be immersed in water.

Even though the electronic components are protected in their casing and the polyethylene foam, they do not like shocks. You will therefore be well advised to protect your instrument from impact, as a result of falls or otherwise.

Warranty

This limited warranty shall be in effect for one year after the date of purchase by the original consumer purchaser. During this limited warranty period, JDC ELECTRONIC SA will repair or replace without charges any defective product with a comparable product. This limited warranty will not apply to any instrument that has been misused, improperly installed, repaired, altered or which has been the subject of any negligence or accident.



...SWISS PRECISION INSTRUMENTS

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